

In the Claims:

1. (Currently amended) An isolated and purified zinc finger-nucleotide binding polypeptide that consists essentially of a nucleotide binding region having the sequence of SEQ ID NO:41 such that the nucleotide-binding activity of the polypeptide resides in the nucleotide-binding region having the sequence of SEQ ID NO:41.

2.-21. (Cancelled)

22. (Withdrawn) An isolated zinc finger-nucleotide binding polypeptide comprising from 2 to about 12 different nucleotide binding regions, said different nucleotide binding regions selected from a group consisting of the amino acid sequences set forth in SEQ ID NO:1 through SEQ ID NO:110.

23. (Withdrawn) The polypeptide of claim 22 comprising from 2 to about 6 of the different nucleotide binding regions.

24. (Withdrawn) The polypeptide of claim 22, wherein the different nucleotide binding regions are operatively linked together by one or more linkers having the sequence of SEQ ID NO:111.

25. (Withdrawn) The polypeptide of claim 22 further operatively linked to one or more transcription regulating factors.

26. (Withdrawn) The polypeptide of claim 25, wherein the one or more transcription regulating factors comprises one or more leucine zippers.

27. (Withdrawn) An isolated and purified polynucleotide that encodes a polypeptide comprising from 2 to about 12 different nucleotide binding regions, said different

nucleotide binding regions selected from a group consisting of the amino acid sequences set forth in SEQ ID NO:1 through SEQ ID NO:110.

28. (Withdrawn) An expression vector comprising the polynucleotide of claim 27.

29. (Withdrawn) A process of regulating a nucleotide sequence that contains the sequence 5'-(GNN)_n-3' (SEQ ID NO:123), where n is an integer from 1 to 6, the process comprising exposing the nucleotide sequence to an effective amount of the polypeptide of claim 22.

30. (Withdrawn) The process of claim 29 wherein the sequence 5'-(GNN)_n-3' (SEQ ID NO:123) is located in a transcribed region of the nucleotide sequence.

31. (Withdrawn) The process of claim 29 wherein the sequence 5'-(GNN)_n-3' (SEQ ID NO:123) is located in a promoter region of the nucleotide sequence.

32. (Withdrawn) The process of claim 29 wherein the sequence 5'-(GNN)_n-3' (SEQ ID NO:123) is located in an expressed sequence tag.

33. (Withdrawn) The process of claim 29 wherein the polypeptide is operatively linked to one or more transcription regulating factors.

34. (Withdrawn) A medicament comprising the polypeptide of claim 22.

35. (Withdrawn) The polypeptide of claim 2, wherein one of the different nucleotide binding regions contains SEQ ID NO:41.

36. (Withdrawn) The polypeptide of claim 2, wherein one of the different nucleotide binding regions contains SEQ ID NO:59.

37. (Withdrawn) The polypeptide of claim 2, wherein one of the different nucleotide binding regions contains SEQ ID NO:80.

38. (New) An isolated zinc finger-nucleotide binding polypeptide comprising from 2 to about 12 different nucleotide binding regions, said different nucleotide binding regions each selected from a group consisting of the amino acid sequences set forth in SEQ ID NO:1 through SEQ ID NO:110, such that each amino acid sequence that comprises a nucleotide binding region has leucine at position 4, valine, serine, or threonine at position 5, and lysine or arginine at position 6.

39. (New) The polypeptide of claim 38 comprising from 2 to about 6 of the different nucleotide binding regions.

40. (New) The polypeptide of claim 38, wherein the different nucleotide binding regions are operatively linked together by one or more linkers having the sequence of SEQ ID NO:111.

41. (New) The polypeptide of claim 38 further operatively linked to one or more transcription regulating factors.

42. (New) The polypeptide of claim 41, wherein the one or more transcription regulating factors comprises one or more leucine zippers.

43. (New) An isolated and purified polynucleotide that encodes a polypeptide comprising from 2 to about 12 different nucleotide binding regions, said different nucleotide binding regions each selected from a group consisting of the amino acid sequences set forth in SEQ ID NO:1 through SEQ ID NO:110, such that each amino acid sequence that comprises a nucleotide binding region has leucine at position 4, valine, serine, or threonine at position 5, and lysine or arginine at position 6.

44. (New) An expression vector comprising the polynucleotide of claim 43.

45. (New) A process of regulating a nucleotide sequence that contains the sequence 5'-(GNN)_n-3' (SEQ ID NO:123), where n is an integer from 1 to 6, the process comprising exposing the nucleotide sequence to an effective amount of the polypeptide of claim 38.

46. (New) The process of claim 45 wherein the sequence 5'-(GNN)_n-3' (SEQ ID NO:123) is located in a transcribed region of the nucleotide sequence.

47. (New) The process of claim 45 wherein the sequence 5'-(GNN)_n-3' (SEQ ID NO:123) is located in a promoter region of the nucleotide sequence.

48. (New) The process of claim 45 wherein the sequence 5'-(GNN)_n-3' (SEQ ID NO:123) is located in an expressed sequence tag.

49. (New) The process of claim 45 wherein the polypeptide is operatively linked to one or more transcription regulating factors.

50. (New) A medicament comprising the polypeptide of claim 38.